### Figure 1A

>1864683	GGGGCTGTAC	CACCCCCTCC	CCACACCIICA	CCCCCCCAACC	Chacaaaaa
>1711346	AC ACT OF SECOND		CCAGAGCTGA		
>1711346	AC	CAGGGCGTGC CAGGGCGTGC			GAGGCCCGGA
Consensus	GGGGCTGTAC	CAGGGCGTGC			GAGGCCCGGA
Compensus	GGGGCIGIAC	CAGGGCGTGC	CCAGAGCTGA	GCCGGGCACC	GAGGCCCGGA
>1864683	GACACTATGA	TGAAGGCGTT	CGGATGGGCA	GCCTGGGGCT	GTTCCTGCAG
>1711346	GACACTATGA	TGAAGGCGTT	CGGATGGGCA	GCCTGGGGCT	GTTCCTGCAG
>1711346	GACACTATGA	TGAAGGCGTT			
Consensus	GACACTATGA		•	GCCTGGGGCT	
· · · · · · · · · · · · · · · · · · ·				000100001	OTTCCTGC/AG
>1864683	TGCGCCATCT	CCCTGGTCTT	CTCTCTGGTC	ATGGACCGGC	TGGTGCAGCG
>1711346	TGCGCCATCT	CCCTGGTCTT	CTCTCTGGTC	ATGGACCGGC	TGGTGCAGCG
>1711346	TGCGCCATCT	CCCTGGTCTT	CTCTCTGGTC	ATGGACCGGC	TGGTGCAGCG
Consensus	TGCGCCATCT	CCCTGGTCTT	CTCTCTGGTC	ATGGACCGGC	TGGTGCAGCG
>1864683	ATTCGGCACT	CGAGCAGTCT	ATTTGGCCAG	TGTGGCAGCT	TTCCCTGTGG
>1711346	ATTCGGCACT	CGAGCAGTCT	ATTTGGCCAG	TGTGGCAGCT	TTCCCTGTGG
>1711346	ATTCGGCACT	CGAGCAGTCT	ATTTGGCCAG	TGTGGCAGCT	TTCCCTGTGG
Consensus	ATTCGGCACT	CGAGCAGTCT	ATTTGGCCAG	TGTGGCAGCT	TTCCCTGTGG
	•				
>1864683	CTGCCGGTGC	CACATGCCTG	TCCCACAGTG	TGGCCGTGGT	GACAGCTTCA
>1711346	CTGCCGGTGC	CACATGCCTG	TCCCA		
>1711346	CTGCCGGTGC	CACATGCCTG	TCCCACAGTG	TGGCCGTGGT	GACAGCTTCA
>1913982					GACAGCTTCA
Can	amaaaaaaaaa		· ·		
Consensus	CTGCCGGTGC	CACATGCCTG	TCCCACAGTG	TGGCCGTGGT	GACAGCTTCA
		CACATGCCTG	TCCCACAGTG	TGGCCGTGGT	GACAGCTTCA
>1864683	GCCGCCTT				
>1864683 >1711346	GCCGCCTT GCCGCCCTCA	CCGGGTTCAC	CTTCTCAGCC	CTGCAGATCC	TGCCCTACAC
>1864683 >1711346 >1913982	GCCGCCTT GCCGCCCTCA GCCGCCCTCA	CCGGGTTCAC CCGGGTTCAC	CTTCTCAGCC CTTCTCAGCC	CTGCAGATCC CTGCAGATCC	TGCCCTACAC TGCCCTACAC
>1864683 >1711346	GCCGCCTT GCCGCCCTCA GCCGCCCTCA	CCGGGTTCAC CCGGGTTCAC	CTTCTCAGCC	CTGCAGATCC CTGCAGATCC	TGCCCTACAC TGCCCTACAC
>1864683 >1711346 >1913982 Consensus	GCCGCCTT GCCGCCCTCA GCCGCCCTCA	CCGGGTTCAC CCGGGTTCAC CCGGGTTCAC	CTTCTCAGCC CTTCTCAGCC CTTCTCAGCC	CTGCAGATCC CTGCAGATCC CTGCAGATCC	TGCCCTACAC TGCCCTACAC TGCCCTACAC
>1864683 >1711346 >1913982 Consensus >1711346	GCCGCCTT GCCGCCCTCA GCCGCCCTCA ACTGGCCTCC	CCGGGTTCAC CCGGGTTCAC CCGGGTTCAC	CTTCTCAGCC CTTCTCAGCC CTTCTCAGCC	CTGCAGATCC CTGCAGATCC CTGCAGATCC	TGCCCTACAC TGCCCTACAC TGCCCTACAC
>1864683 >1711346 >1913982 Consensus >1711346 >1913982	GCCGCCTT GCCGCCCTCA GCCGCCCTCA GCCGCCCTCA ACTGGCCTCC	CCGGGTTCAC CCGGGTTCAC CCGGGTTCAC CTCTACCACC	CTTCTCAGCC CTTCTCAGCC CTTCTCAGCC GGGAGAAGCA GGGAGAAGCA	CTGCAGATCC CTGCAGATCC CTGCAGATCC GGTGTTCCTG GGTGTTCCTG	TGCCCTACAC TGCCCTACAC TGCCCTACAC CCCAAATACC CCCAAATACC
>1864683 >1711346 >1913982 Consensus >1711346	GCCGCCTT GCCGCCCTCA GCCGCCCTCA GCCGCCCTCA ACTGGCCTCC	CCGGGTTCAC CCGGGTTCAC CCGGGTTCAC CTCTACCACC	CTTCTCAGCC CTTCTCAGCC CTTCTCAGCC	CTGCAGATCC CTGCAGATCC CTGCAGATCC GGTGTTCCTG GGTGTTCCTG	TGCCCTACAC TGCCCTACAC TGCCCTACAC CCCAAATACC CCCAAATACC
>1864683 >1711346 >1913982 Consensus >1711346 >1913982	GCCGCCTT GCCGCCCTCA GCCGCCCTCA GCCGCCCTCA ACTGGCCTCC ACTGGCCTCC	CCGGGTTCAC CCGGGTTCAC CCGGGTTCAC CTCTACCACC CTCTACCACC CTCTACCACC	CTTCTCAGCC CTTCTCAGCC CTTCTCAGCC GGGAGAAGCA GGGAGAAGCA GGGAGAAGCA	CTGCAGATCC CTGCAGATCC CTGCAGATCC GGTGTTCCTG GGTGTTCCTG GGTGTTCCTG	TGCCCTACAC TGCCCTACAC TGCCCTACAC CCCAAATACC CCCAAATACC CCCAAATACC
>1864683 >1711346 >1913982 Consensus >1711346 >1913982 Consensus	GCCGCCTT GCCGCCCTCA GCCGCCCTCA GCCGCCCTCA ACTGGCCTCC ACTGGCCTCC ACTGGCCTCC	CCGGGTTCAC CCGGGTTCAC CCGGGTTCAC CTCTACCACC CTCTACCACC CTCTACCACC CTCTACCACC	CTTCTCAGCC CTTCTCAGCC CTTCTCAGCC GGGAGAAGCA GGGAGAAGCA GGGAGAAGCA AGCAGTGAGG	CTGCAGATCC CTGCAGATCC CTGCAGATCC CTGCAGATCC GGTGTTCCTG GGTGTTCCTG GGTGTTCCTG	TGCCCTACAC TGCCCTACAC TGCCCTACAC CCCAAATACC CCCAAATACC CCCAAATACC CCCAAATACC
>1864683 >1711346 >1913982 Consensus >1711346 >1913982 Consensus >1711346	GCCGCCTT GCCGCCCTCA GCCGCCCTCA GCCGCCCTCA ACTGGCCTCC ACTGGCCTCC ACTGGCCTCC ACTGGCCTCC	CCGGGTTCAC CCGGGTTCAC CCGGGTTCAC CTCTACCACC CTCTACCACC CTCTACCACC CTCTACCACC TGGAGGTGCT TGGAGGTGCT	CTTCTCAGCC CTTCTCAGCC CTTCTCAGCC CTTCTCAGCC GGGAGAAGCA GGGAGAAGCA GGGAGAAGCA AGCAGTGAGG AGCAGTGAGG	CTGCAGATCC CTGCAGATCC CTGCAGATCC CTGCAGATCC GGTGTTCCTG GGTGTTCCTG GGTGTTCCTG ACAGCCTGAT ACAGCCTGAT	TGCCCTACAC TGCCCTACAC TGCCCTACAC CCCAAATACC CCCAAATACC CCCAAATACC GACCAGCTTC GACCAGCTTC
>1864683 >1711346 >1913982 Consensus >1711346 >1913982 Consensus >1711346 >1913982	GCCGCCTT GCCGCCCTCA GCCGCCCTCA GCCGCCCTCA ACTGGCCTCC ACTGGCCTCC ACTGGCCTCC ACTGGCCTCC	CCGGGTTCAC CCGGGTTCAC CCGGGTTCAC CTCTACCACC CTCTACCACC CTCTACCACC CTCTACCACC TGGAGGTGCT TGGAGGTGCT	CTTCTCAGCC CTTCTCAGCC CTTCTCAGCC GGGAGAAGCA GGGAGAAGCA GGGAGAAGCA AGCAGTGAGG	CTGCAGATCC CTGCAGATCC CTGCAGATCC CTGCAGATCC GGTGTTCCTG GGTGTTCCTG GGTGTTCCTG ACAGCCTGAT ACAGCCTGAT	TGCCCTACAC TGCCCTACAC TGCCCTACAC CCCAAATACC CCCAAATACC CCCAAATACC GACCAGCTTC GACCAGCTTC
>1864683 >1711346 >1913982 Consensus >1711346 >1913982 Consensus >1711346 >1913982	GCCGCCTT GCCGCCCTCA GCCGCCCTCA GCCGCCCTCA ACTGGCCTCC ACTGGCCTCC ACTGGCCTCC ACTGGCCTCC GAGGGGACAC GAGGGGACAC	CCGGGTTCAC CCGGGTTCAC CCGGGTTCAC CTCTACCACC CTCTACCACC CTCTACCACC CTCTACCACC TGGAGGTGCT TGGAGGTGCT TGGAGGTGCT	CTTCTCAGCC CTTCTCAGCC CTTCTCAGCC CTTCTCAGCC GGGAGAAGCA GGGAGAAGCA GGGAGAAGCA AGCAGTGAGG AGCAGTGAGG	CTGCAGATCC CTGCAGATCC CTGCAGATCC CTGCAGATCC GGTGTTCCTG GGTGTTCCTG GGTGTTCCTG ACAGCCTGAT ACAGCCTGAT ACAGCCTGAT	TGCCCTACAC TGCCCTACAC TGCCCTACAC CCCAAATACC CCCAAATACC CCCAAATACC GACCAGCTTC GACCAGCTTC
>1864683 >1711346 >1913982 Consensus >1711346 >1913982 Consensus >1711346 >1913982 Consensus	GCCGCCTT GCCGCCCTCA GCCGCCCTCA GCCGCCCTCA ACTGGCCTCC ACTGGCCTCC ACTGGCCTCC ACTGGCCTCC GAGGGGACAC GAGGGGACAC	CCGGGTTCAC CCGGGTTCAC CCGGGTTCAC CTCTACCACC CTCTACCACC CTCTACCACC CTCTACCACC TGGAGGTGCT TGGAGGTGCT TGGAGGTGCT CTGAGGTGCT	CTTCTCAGCC CTTCTCAGCC CTTCTCAGCC CTTCTCAGCC GGGAGAAGCA GGGAGAAGCA GGGAGAAGCA AGCAGTGAGG AGCAGTGAGG AGCAGTGAGG AGCAGTGAGG	CTGCAGATCC CTGCAGATCC CTGCAGATCC CTGCAGATCC GGTGTTCCTG GGTGTTCCTG GGTGTTCCTG ACAGCCTGAT ACAGCCTGAT ACAGCCTGAT	TGCCCTACAC TGCCCTACAC TGCCCTACAC TGCCCTACAC CCCAAATACC CCCAAATACC CCCAAATACC GACCAGCTTC GACCAGCTTC GACCAGCTTC
>1864683 >1711346 >1913982 Consensus >1711346 >1913982 Consensus >1711346 >1913982 Consensus >1711346	GCCGCCTT GCCGCCCTCA GCCGCCCTCA GCCGCCCTCA ACTGGCCTCC ACTGGCCTCC ACTGGCCTCC GAGGGGACAC GAGGGGACAC GAGGGGACAC CTGCCAGGCC	CCGGGTTCAC CCGGGTTCAC CCGGGTTCAC CTCTACCACC CTCTACCACC CTCTACCACC CTCTACCACC TGGAGGTGCT TGGAGGTGCT TGGAGGTGCT CTGAGGTGCT	CTTCTCAGCC CTTCTCAGCC CTTCTCAGCC CTTCTCAGCC GGGAGAAGCA GGGAGAAGCA GGGAGAAGCA AGCAGTGAGG AGCAGTGAGG AGCAGTGAGG AGCAGTGAGG AGCAGTGAGG	CTGCAGATCC CTGCAGATCC CTGCAGATCC CTGCAGATCC GGTGTTCCTG GGTGTTCCTG GGTGTTCCTG ACAGCCTGAT ACAGCCTGAT ACAGCCTGAT ACAGCCTGAT	TGCCCTACAC TGCCCTACAC TGCCCTACAC TGCCCTACAC CCCAAATACC CCCAAATACC CCCAAATACC GACCAGCTTC GACCAGCTTC GACCAGCTTC
>1864683 >1711346 >1913982 Consensus >1711346 >1913982 Consensus >1711346 >1913982 Consensus >1711346 >1913982	GCCGCCTT GCCGCCCTCA GCCGCCCTCA GCCGCCCTCA ACTGGCCTCC ACTGGCCTCC ACTGGCCTCC ACTGGCCTCC CAGGGGACAC GAGGGGACAC GAGGGGACAC CTGCCAGGCC CTGCCAGGCC	CCGGGTTCAC CCGGGTTCAC CCGGGTTCAC CTCTACCACC CTCTACCACC CTCTACCACC CTCTACCACC CTCTACCACC CTCTACCACC CTCTACCACC CTCTACCACC CTCTACCACC	CTTCTCAGCC CTTCTCAGCC CTTCTCAGCC CTTCTCAGCC GGGAGAAGCA GGGAGAAGCA GGGAGAAGCA AGCAGTGAGG AGCAGTGAGG AGCAGTGAGG AGCAGTGAGG AGCAGTGAGG	CTGCAGATCC CTGCAGATCC CTGCAGATCC CTGCAGATCC GGTGTTCCTG GGTGTTCCTG GGTGTTCCTG ACAGCCTGAT ACAGCCTGAT ACAGCCTGAT CCTAATGGAC CCTAATGGAC CCTAATGGAC	TGCCCTACAC TGCCCTACAC TGCCCTACAC TGCCCTACAC CCCAAATACC CCCAAATACC CCCAAATACC GACCAGCTTC GACCAGCTTC GACCAGCTTC ACGTGGGTGC ACGTGGGTGC ACGTGGGTGC
>1864683 >1711346 >1913982 Consensus >1711346 >1913982 Consensus >1711346 >1913982 Consensus >1711346 >1913982 >825779 Consensus	GCCGCCTT GCCGCCCTCA GCCGCCCTCA GCCGCCCTCA ACTGGCCTCC ACTGGCCTCC ACTGGCCTCC ACTGGCCTCC CAGGGGACAC GAGGGGACAC GAGGGGACAC CTGCCAGGCC CTGCCAGGCC CTGCCAGGCC	CCGGGTTCAC CCGGGTTCAC CCGGGTTCAC CTCTACCACC CTAAGCCTGG CTAAGCCTGG CTAAGCCTGG	CTTCTCAGCC CTTCTCAGCC CTTCTCAGCC CTTCTCAGCC GGGAGAAGCA GGGAGAAGCA GGGAGAAGCA AGCAGTGAGG AGCAGTGAGG AGCAGTGAGG AGCTCCCTTC AGCTCCCTTC AGCTCCCTTC	CTGCAGATCC CTGCAGATCC CTGCAGATCC CTGCAGATCC GGTGTTCCTG GGTGTTCCTG GGTGTTCCTG ACAGCCTGAT ACAGCCTGAT ACAGCCTGAT CCTAATGGAC CCTAATGGAC CCTAATGGAC CCTAATGGAC	TGCCCTACAC TGCCCTACAC TGCCCTACAC TGCCCTACAC CCCAAATACC CCCAAATACC CCCAAATACC GACCAGCTTC GACCAGCTTC GACCAGCTTC ACGTGGGTGC ACGTGGGTGC ACGTGGGTGC ACGTGGGTGC
>1864683 >1711346 >1913982 Consensus >1711346 >1913982 Consensus >1711346 >1913982 Consensus >1711346 >1913982 >825779 Consensus >1711346	GCCGCCTT GCCGCCCTCA GCCGCCCTCA GCCGCCCTCA ACTGGCCTCC ACTGGCCTCC ACTGGCCTCC ACTGGCCTCC CAGGGGACAC GAGGGGACAC GAGGGGACAC CTGCCAGGCC CTGCCAGGCC CTGCCAGGCC	CCGGGTTCAC CCGGGTTCAC CCGGGTTCAC CTCTACCACC CTAAGCCTGG CTAAGCCTGG CTAAGCCTGG	CTTCTCAGCC CTTCTCAGCC CTTCTCAGCC CTTCTCAGCC GGGAGAAGCA GGGAGAAGCA GGGAGAAGCA AGCAGTGAGG AGCAGTGAGG AGCAGTGAGG AGCTCCCTTC AGCTCCCTTC GCTCCCTTC	CTGCAGATCC CTGCAGATCC CTGCAGATCC CTGCAGATCC GGTGTTCCTG GGTGTTCCTG GGTGTTCCTG ACAGCCTGAT ACAGCCTGAT ACAGCCTGAT CCTAATGGAC CCTAATGGAC CCTAATGGAC CCTAATGGAC	TGCCCTACAC TGCCCTACAC TGCCCTACAC TGCCCTACAC CCCAAATACC CCCAAATACC CCCAAATACC GACCAGCTTC GACCAGCTTC GACCAGCTTC ACGTGGGTGC ACGTGGGTGC ACGTGGGTGC ACGTGGGTGC
>1864683 >1711346 >1913982 Consensus >1711346 >1913982 Consensus >1711346 >1913982 Consensus >1711346 >1913982 >825779 Consensus >1711346 >1913982	GCCGCCTT GCCGCCCTCA GCCGCCCTCA GCCGCCCTCA ACTGGCCTCC ACTGGCCTCC ACTGGCCTCC ACTGGCCTCC CAGGCCTCC GAGGGGACAC GAGGGGACAC CTGCCAGGCC CTGCCAGGCC CTGCCAGGCC CTGCCAGGCC	CCGGGTTCAC CCGGGTTCAC CCGGGTTCAC CTCTACCACC CTCTACCACC CTCTACCACC CTCTACCACC TGGAGGTGCT TGGAGGTGCT TGGAGGTGCT CTAAGCCTGG CTAAGCCTGG CTAAGCCTGG	CTTCTCAGCC CTTCTCAGCC CTTCTCAGCC CTTCTCAGCC GGGAGAAGCA GGGAGAAGCA GGGAGAAGCA AGCAGTGAGG AGCAGTGAGG AGCAGTGAGG AGCTCCCTTC AGCTCCCTTC AGCTCCCTTC	CTGCAGATCC CTGCAGATCC CTGCAGATCC GGTGTTCCTG GGTGTTCCTG GGTGTTCCTG ACAGCCTGAT ACAGCCTGAT ACAGCCTGAT CCTAATGGAC CCTAATGGAC CCTAATGGAC CCTAATGGAC CCTAATGGAC	TGCCCTACAC TGCCCTACAC TGCCCTACAC TGCCCTACAC CCCAAATACC CCCAAATACC CCCAAATACC GACCAGCTTC GACCAGCTTC GACCAGCTTC ACGTGGGTGC ACGTGGGTGC ACGTGGGTGC ACGTGGGTGC ACGTGGGTGC
>1864683 >1711346 >1913982 Consensus >1711346 >1913982 Consensus >1711346 >1913982 Consensus >1711346 >1913982 >825779 Consensus >1711346	GCCGCCTT GCCGCCCTCA GCCGCCCTCA GCCGCCCTCA ACTGGCCTCC ACTGGCCTCC ACTGGCCTCC ACTGGCACAC GAGGGGACAC GAGGGGACAC CTGCCAGGCC CTGCCAGGCC CTGCCAGGCC TGGAGGCAGT TGGAGGCAGT	CCGGGTTCAC CCGGGTTCAC CCGGGTTCAC CTCTACCACC CTCCTCCC CCCCCCCC	CTTCTCAGCC CTTCTCAGCC CTTCTCAGCC CTTCTCAGCC GGGAGAAGCA GGGAGAAGCA GGGAGAAGCA AGCAGTGAGG AGCAGTGAGG AGCAGTGAGG AGCTCCCTTC AGCTCCCTTC AGCTCCCTTC AGCTCCCTTC	CTGCAGATCC CTGCAGATCC CTGCAGATCC CTGCAGATCC GGTGTTCCTG GGTGTTCCTG GGTGTTCCTG ACAGCCTGAT ACAGCCTGAT ACAGCCTGAT ACAGCCTGAT CCTAATGGAC CCTAATGGAC CCTAATGGAC CCTAATGGAC CCTAATGGAC	TGCCCTACAC TGCCCTACAC TGCCCTACAC TGCCCTACAC CCCAAATACC CCCAAATACC CCCAAATACC GACCAGCTTC GACCAGCTTC GACCAGCTTC GACGGGTGC ACGTGGGTGC ACGTGGGTGC ACGTGGGTGC ACGTGGGTGC ACGTGGGTGC ACGTGGGTGC
>1864683 >1711346 >1913982 Consensus >1711346 >1913982 Consensus >1711346 >1913982 Consensus >1711346 >1913982 >825779 Consensus >1711346 >1913982	GCCGCCTT GCCGCCCTCA GCCGCCCTCA GCCGCCCTCA ACTGGCCTCC ACTGGCCTCC ACTGGCCTCC ACTGGCACAC GAGGGGACAC GAGGGGACAC CTGCCAGGCC CTGCCAGGCC CTGCCAGGCC TGGAGGCAGT TGGAGGCAGT TGGAGGCAGT	CCGGGTTCAC CCGGGTTCAC CCGGGTTCAC CTCTACCACC CTCTACCACC CTCTACCACC CTCTACCACC TGGAGGTGCT TGGAGGTGCT TGGAGGTGCT CTAAGCCTGG CTAAGCCTGG CTAAGCCTGG	CTTCTCAGCC CTTCTCAGCC CTTCTCAGCC CTTCTCAGCC GGGAGAAGCA GGGAGAAGCA GGGAGAAGCA AGCAGTGAGG AGCAGTGAGG AGCAGTGAGG AGCTCCCTTC AGCTCCCTTC AGCTCCCTTC CCTCCCTTC	CTGCAGATCC CTGCAGATCC CTGCAGATCC CTGCAGATCC GGTGTTCCTG GGTGTTCCTG GGTGTTCCTG ACAGCCTGAT ACAGCCTGAT ACAGCCTGAT ACAGCCTGAT CCTAATGGAC CCTAATGGAC CCTAATGGAC CCTAATGGAC CCTAATGGAC	TGCCCTACAC TGCCCTACAC TGCCCTACAC TGCCCTACAC CCCAAATACC CCCAAATACC CCCAAATACC GACCAGCTTC GACCAGCTTC GACCAGCTTC GACGGGTGC ACGTGGGTGC

## Figure 1B

>1711346	CCTGTGATGT	CTCCGTACGT	GTGGTGGTGG	GTGAGCCCAC	CGAGGCCAGG
>825779	CCTGTGATGT	CTCCGTACGT	GTGGTGGTGG	GTGAGCCCAC	CGAGGCCAGG-
Consensus	CCTGTGATGT	CTCCGTACGT	GTGGTGGTGG	GTGAGCCCAC	CGAGGCCAGG
>1711346	GTGGTTCCGG	GCCGGGGCAT	CTGCCTGGAC	CTCGCCATCC	TGGATAGTGC
>825779	GTGGTTCCGG	GCCGGGGCAT	CTGCCTGGAC	CTCGCCATCC	TGGATAGTGC
>2626650					TGGATAGTGC
Consensus	GTGGTTCCGG	GCCGGGGCAT	CTGCCTGGAC	CTCGCCATCC	TGGATAGTGC
>1711346	CTTCCTGCTG	TCCCAGGTGG	CCCCATCCCT	GTTTATGGGC	TCCATTGTCC
>825779	CTTCCTGCTG	TCCCAGGTGG	CCCCATCCCT	GTTTATGGGC	TCCATTGTCC
>2626650	CTTCCTGCTG	TCCCAGGTGG	CCCCATCCCT	GTTTATGGGC	TCCATTGTCC
Consensus	CTTCCTGCTG	TCCCAGGTGG	CCCCATCCCT	GTTTATGGGC	TCCATTGTCC
>1711346	AGCTCAGCCA	GTCTGTCACT	GCCTATATGG	TGTCTGCCGC	AGGCCTGGGT
>825779	AGCTCAGCCA	GTCTGTCA			
>2626650	AGCTCAGCCA	GTCTGTCACT	GCCTATATGG	TGTCTGCCGC	AGGC: TGGGT
Consensus	AGCTCAGCCA	GTCTGTCACT	GCCTATATGG	TGTCTGCCGC	AGGCCTGGGT
•					
>1711346	CTGGTCGCCA	TTTACTTTGC	TACACAGGTA	GTATTTGACA	AGAGCGACTT
>2626650	CTGGTCGCCA	TTTACTTTGC	TACACAGGTA	GTATTTGACA	AGAGCGACTT
>1808389					CTT
Consensus	CTGGTCGCCA	TTTACTTTGC	TACACAGGTA	GTATTTGACA	AGAGCGACTT
>1711346	GGCCAAATAC	TCAGCGTAGA	AAACTTCCAG	CACATTGGGG	TGGAGGGCCT
>2626650	GGCCAAATAC	TCAGCGTAGA	ANACTTCCAG	CACATTGGGG	TGGAGGGCCT
>1808389	GGCCAAATAC	TCAGCGTAGA	AAACTTCCAG	CACATTGGGG	TGGAGGGCCT
Consensus	GGCCAAATAC	TCAGCGTAGA	AAACTTCCAG	CACATTGGGG	TGGAGGGCCT
>1711346	GCCTCACTGG	GTCCCAGCTC	CCCGCTCCTG	TTAGCCCCAT	GGGGCTGCCG
>2626650	GCCTCACTGG	GTCCCAGCTC	CC		
>1808389	GCCTCACTGG	GTCCCAGCTC	CCCGCTCCTG	TTAGCCCCAT	GGGGCTGCCG
Consensus	GCCTCACTGG	GTCCCAGCTC	CCCGCTCCTG	TTAGCCCCAT	GGGGCTGCCG
				•	
>1711346	GGCTGGCCGC	CAGTTTCTGT		GTAATGTGGC	TCTCTGCTGC
>1808389	GGCTGGCCGC	CAGTTTCTGT	TGCTGCCAAA	GTAATGTGGC	TCTCTGCTGC
>1651121	GC	CAGTTTCTGT	TGCTGCCAAA	GTAATGTGGC	TCTCTGCTGC
Consensus	GGCTGGCCGC	CAGTTTCTGT	TGCTGCCAAA	GTAATGTGGC	TCTCTGCTGC
>1711346	CACCCTGTGC	TGCTGAGGTG	CGTAGCTGCA	CAGCTGGGGG	CTGGGGCGTC
>1808389	CACCCTGTGC	TGCTGAGGTG	CGTAN: TGCA	CAGCTGGGGG	CTG
>1651121	CACCCTGTGC	TGCTGAGGTG		CAGCTGGGGG	CTGGGGCGTC
Consensus	CACCCTGTGC	TGCTGAGGTG	CGTAG: TGCA	CAGCTGGGGG	CTGGGGCGTC
			•		
>1711346		CTCCCCAGTC			
>1651121		CTCCCCAGTC			
Consensus	CCTCTTCTTCTT	CTCCCCAGTC	TCTAGGGCTG	CCTGACTGGA	GGCCTTCCAA

# Figure 1C

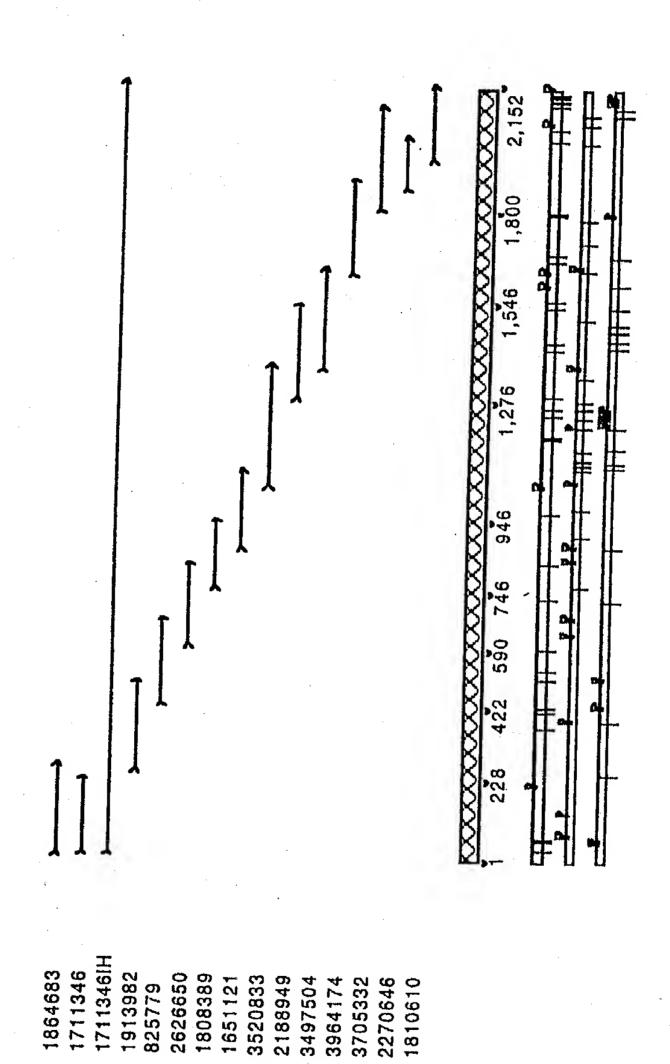
·					
>1711346	GGGGGTTTCA	GTCTGGACTT	ATACAGGGAG	GCCAGAAGGG	CTCCATGCAC
>1651121	GGGGGTTTCA	GTCTGGACTT	ATACAGGGAG	GCCAGAAGGG	CTCCATGCAC
>3520833			•	GCCAGAAGGG	CTCCATGCAC
Consensus	GGGGGTTTCA	GTCTGGACTT	ATACAGGGAG	GCCAGAAGGG	CTCCATGCAC
>1711346	TGGAATGCGG	GGACTCTGCA	GGTGGATTAC	CCAGGCTCAG	GGTTAACAGC
>1651121	TGGAATGCGG	GGACTCTGCA	GGTGGATTAC	NC	
>3520833	TGGAATGCGG	GGACTCTGCA	GGTGGATTAC	CCAGGCTCAG	GGTTAACAGC
Consensus	TGGAATGCGG	GGACTCTGCA	GGTGGATTAC	CCAGGCTCAG	GGTTAACAGC
	•				
>1711346	TAGCCTCCTA	GTTGAGACAC	ACCTAGAGAA	GGGTTTTTGG	GAGCTGAATA
>3520833	TAGCCTCCTA	GTTGAGACAC	ACCTAGAGAA	GGGTTTTTGG	GAGCTGAATA
Consensus	TAGCCTCCTA	GTTGAGACAC	ACCTAGAGAA	GGGTTTTTGG	GAGCTGAATA
>1711346	AACTCAGTCA	CCTGGTTTCC	CATCTCTAAG	CCCCTTAACC	TGCAGCTTCG
>3520833	<b>AACTCAGTCA</b>	CCTGGTTTCC	CATCTCTAAG	CCCCTTAACC	TGCAGCTTCG
Consensus	AACTCAGTCA	CCTGGTTTCC	•	CCCCTTAACC	TGCAGCTTCG
>1711346	TTTAATGTAG	CTCTTGCATG	GGAGTTTCTA	GGATGAAACA	CTCCTCCATG
>3520833	TTTAATGTAG	CTCTTGCATG	GGAGTTTCTA	GGATGAAACA	CTCCTCCATG
Consensus	TTTAATGTAG	CTCTTGCATG	GGAGTTTCTA	GGATGAAACA	CTCCTCCATG
		•			
>1711346	GGATTTGAAC	ATATGAAAGT	TATTTGTAGG	GGAAGAGTCC	TGAGGGGCAA
>3520833	GGATTTGAAC	ATATGAAAGT	TATTTGTAGG	GGAAGAGTCC	TGAGGGGCAA
>2188949			GG	GGAAGAGTCC	TGAGGGGCAA
Consensus	GGATTTGAAC	ATATGAAAGT	TATTTGTAGG	GGAAGAGTCC	TGAGGGGCAA
>1711346	CACACAAGAA	CCAGGTCCCC	TCAGCCCACA	GCACTGTCTT	TTTGCTGATC
>3520833	CACACAAGAA	CCAGGTCCCC	TCAGCCCACA	GCACTGTCTT	TTTGCTGATC
>2188949	CACACAAGAA	CCAGGTCCCC	TCAGCCCACA	GCACTGTCTT	TTTGCTGATC
Consensus	CACACAAGAA	CCAGGTCCCC	TCAGCCCACA	GCACTGTCTT	TTTGCTGATC
	•				
>1711346	CACCCCCTC	TTACCTTTTA	TCAGGATGTG	GCCTGTTGGT	CCTTCTGTTG
>3520833	CANCCCCCTC	TTAC: TTTTA	TCA		
>2188949	CACCCCCTC	TTACCTTTTA	TCAGGATGTG	GCCTGTTGGT	CCTTCTGTTG
>3497504	CTC	TTACCTTTTA	TCAGGATGTG	GCCTGTTGGT	CCTTCTGTTG
Consensus	CACCCCCTC	TTACCTTTTA	TCAGGATGTG	GCCTGTTGGT	CCTTCTGTTG
	•				
>1711346	CCATCACAGA	GACACAGGCA	TTTAAAATATT	TAACTTATTT	ATTTAACAAA
>2188949	CCATCACAGA	GACACAGGCA	TTTAAAATATT	TAACTTATTT	ATTTAACAAA
>3497504	CCATCACAGA	GACACAGGCA	TTTAAATATT	TAACTTATTT	ATTTAACAAA
Consensus	CCATCACAGA	GACACAGGCA	TTTAAATATT	TAACTTATTT	ATTTAACAAA
>1711346	GTAGAAGGGA	ATCCATTGCT	AGCTTTTCTG	TGTTGGTGTC	TAATATTTGG
>2188949	GTAGAAGGGA	ATCCATTGCT	- ·		TAATATTTGG
>3497504		ATCCATTGCT			TAATATTTGG
Consensus		ATCCATTGCT			·
			<del> </del>		

## Figure 1D

>1711346	GTAGGGTGGG	GGATCCCCAA	CAATCAGGTC	CCCTGAGATA	GCTGGTCATT
>2188949	GTAGGGTGGG	GGATCCCCAA	CAATCAGGTC		
>3497504	GTANGGTGGG	GGATCCCCAA	CAATCAGGTC		
Consensus	GTAGGGTGGG	GGATCCCCAA	CAATCAGGTC	CCCTGAGATA	GCTGGTCATT
>1711346	GGGCTGATCA	TTGCCAGAAT	CTTCTTCTCC	TGGGGTCTGG	CCCCCAAAA
>3497504	GGGCTGATCA	TTGCCAGAAT	CTTCTTCTCC	TGGGGTCTGG	CCCCCAAAA
Consensus	GGGCTGATCA	TTGCCAGAAT	CTTCTTCTCC	TGGGGTCTGG	CCCCCAAAA
>1711346	TGCCTAACCC	AGGACCTTGG	AAATTCTACT	CATCCCAAAT	GATAATTCCA
>3497504	TGCCTAACCC	AGGACCTTGG	AAATTCTACT		
>3964174			AAATTCTACT	CATCCCAAAT	GATAATTCCA
Consensus	TGCCTAACCC	AGGACCTTGG			
>1711346	AATGCTGTTA	CCCAAGGTTA	GCCTCTTC A A	CCA ACCTACA	GGGTGGGGCT
>3964174	AATGCTGTTA				GGGTGGGGCT
Consensus	AATGCTGTTA				GGGTGGGGCT
			00010110/11	COMOGIAGA	GGGTGGGGT
>1711346	TCAGGTCTCA	ACGGCTTCCC	TAACCACCCC	TCTTCTCTTG	GCCCAGCCTG
>3964174	TCAGGTCTCA	ACGGCTTCCC	TAACCACCCC	TCTTCTCTTG	GCCCAGCCTG
Consensus	TCAGGTCTCA	ACGGCTTCCC	TAACCACCCC	TCTTCTCTTG	GCCCAGCCTG
>1711346	GTTCCCCCCA	CTTCCACTCC	CCTCTACTCT	CTCTAGGACT	GGGCTGATGA
>3964174			CCTCTACTCT		
>3705332					A
Consensus	GTTCCCCCCA	CTTCCACTCC	CCTCTACTCT	CTCTAGGACT	
>1711346	AGGCACTGCC	CAAAATTTCC	CCTACCCCCA	ACTTTCCCCT	ACCCCCAACT
>3964174			CCTACCCCCA		
>3705332	AGGCACTGCC		CCTACCCCCA		
Consensus	AGGCACTGCC		CCTACCCCCA		
>1711346	TTCCCCACCA	GCTCCACAAC	CCTGTTTGGA	GCTACTGCAG	GACCAGAAGC
>3964174			CCTGTTTGGA		GT
>3705332			CCTGTTTGGA		
>2270646			CCTGTTTGGA		
Consensus	TTCCCCACCA		CCTGTTTGGA		
>1711346	ACAAAGTGCG	GTTTCCCAAG	CCTTTGTCCA	TCTCACCCC	CACACMAMAM
>3705332	_			TCTCAGCCCC	
>2270646				TCTCAGCCCC	
>1810610					CAGAGTATAT
Consensus	ACAAAGTGCG	GTTTCCCAAG	CCTTTGTCCA		<b>+</b> · · · · · · · · · · · · · · · · · · ·
>1711346	СФСФССФФСС	CCA AMCMOAC	ACAGAAACTC	<i><b>NCCNCCNCCC</b></i>	aamaaamas ~
>3705332					
>2270646			ACAGAAACTC ACANAAACTC		
>1810610			ACANAAACTC		
Consensus					•
	CACACACAC	JOANICICAC	ACAGAAACTC	MOGRGCACCC	CUTGCUTGAG

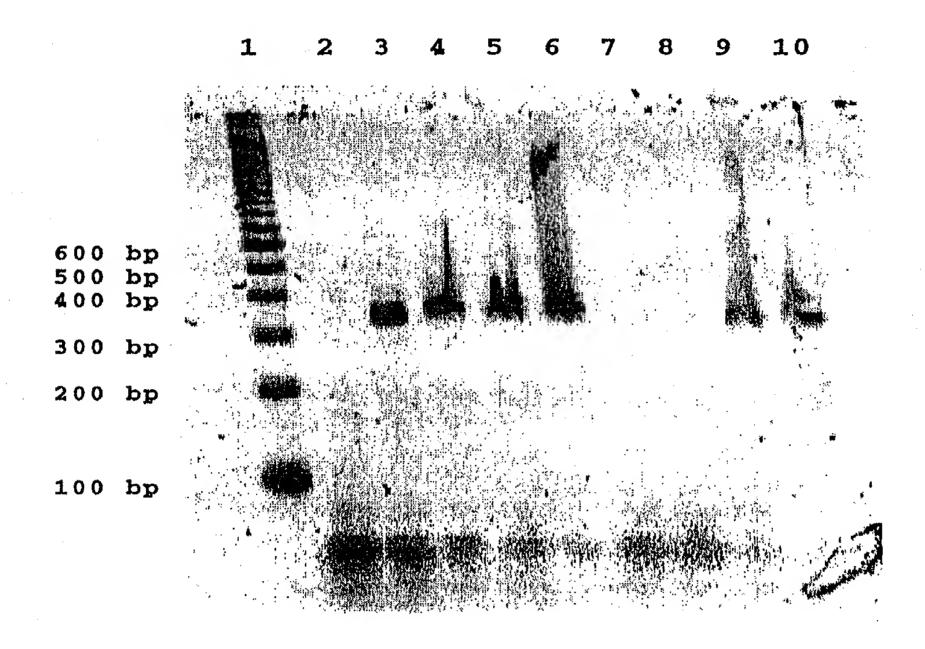
### Figure 1E

>1711346	CTAAGGGAGG	TCTTATCTCT	CAGGGGGGT	TTAAGTGCCG	TTTGCAATAA
>3705332	CTAAGGGAGG	TCTTATCTCT	CAGGGGGGGT	TTAAGTGCCG	TTTGCAATAA
>2270646	CTAAGGGNGG	TC			•
>1810610	CTAAGGGAGG	TCTTATCTCT	CAGGGGGGGT	TTAAGTGCCG	TTTGCAATAA
Consensus	CTAAGGGAGG	TCTTATCTCT	CAGGGGGGT	TTAAGTGCCG	TTTGCAATAA
>1711346	TGTCGTCTTA	TTTTTTTAGC	GGGGTGAATA	TTTTATACTG	TAAGTGAGCA
>3705332	TGTCGTCTTA	TTTATTTAGC	GGGGTGAATA	TTTTATACTG	TAA
>1810610	TGTCGTCTTA	TTTATTTAGC	GGGGTGAATA	TTTTATACTG	TAAGTGAGCA
Consensus	TGTCGTCTTA	TTTATTTAGC	GGGGTGAATA	TTTTATACTG	TAAGTGAGCA
>1711346	ATCAGAGTAT	AATGTTTATG	GTGACAAAAT	TAAAGGCTTT	CTTATATGTT
>1810610	ATCAGAGTAT	AATGTTTATG	GTGACAAAAT	TAAAGGCTTT	CTTATATGTT
Consensus	ATCAGAGTAT	AATGTTTATG	GTGACAAAAT	TAAAGGCTTT	CTTATATGTT
>1711346	TA				
>1810610	T				
Consensus	TA	-			



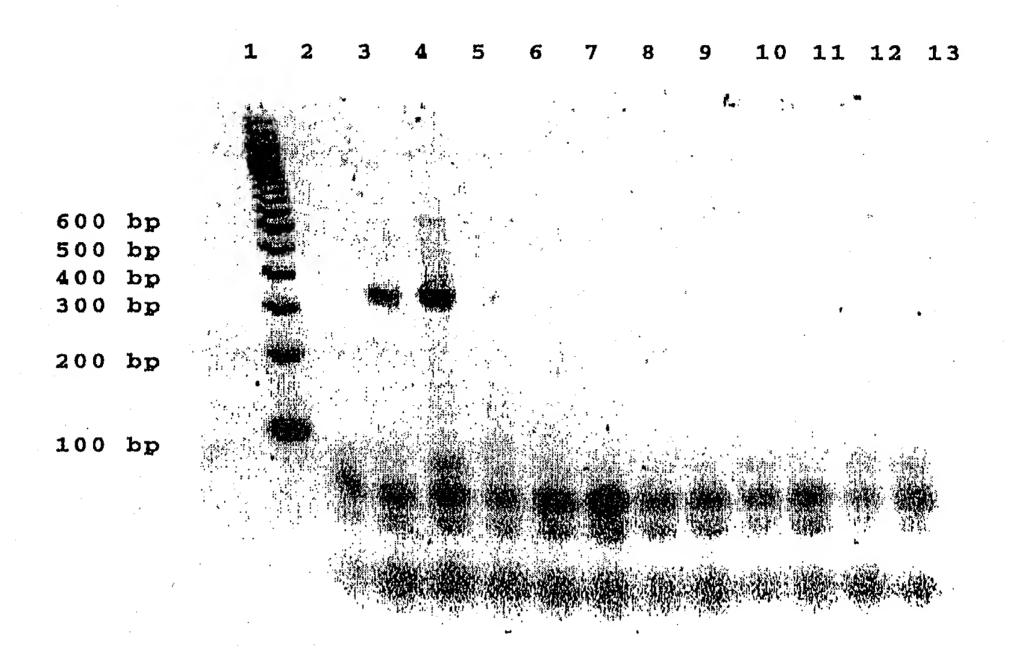
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#### Figure 3A



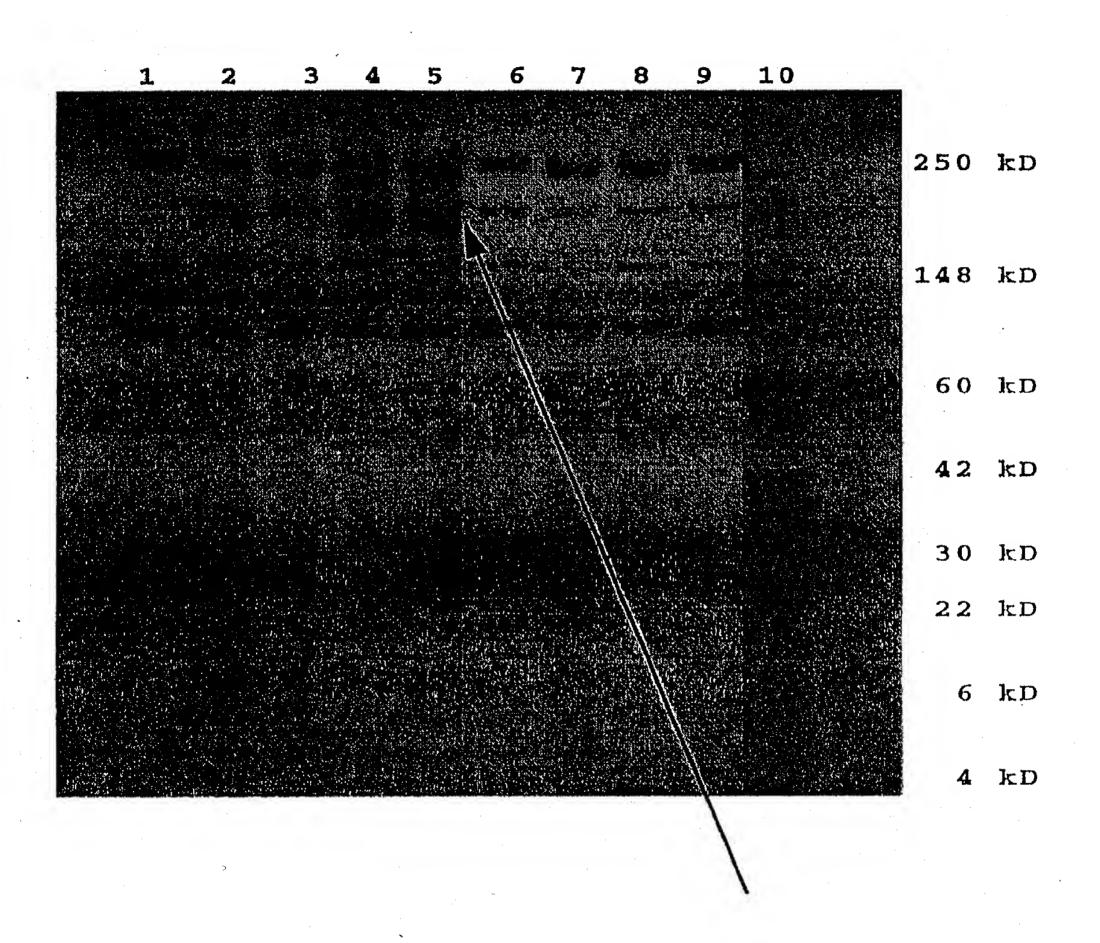
Lane	Tissue	Lane	Tissue
1	100 bp DNA Marker	6	Prostate BPH
2	Placental DNA	. 7	Prostate Cancer
3	Prostate BPH	8	Prostate Cancer
4	Prostate BPH	9	Prostate Cancer
5	Prostate Cancer	10	Prostate BPH Diluted
			duplicate of Lane 6

### Figure 3B



Lane	Tissue	Lane	Tissue
1	100 bp DNA Marker	8	Breast Cancer
2	Placental DNA	9	Breast Cancer
3	Prostate BPH	10	Normal Breast
4	Prostate Cancer	1.1	Normal Lung
5	Colon Cancer	12	Normal Lung
6	Colon Cancer	13	Lung Cancer
. 7	Normal Colon	,	

#### Figure 4



Lane	Tissue	Lane	Tissue
1	Colon Cancer	6	Normal Lung
2	BPH	7	Normal Lung
3	BPH	8	Breast Cancer
4	BPH	9	Breast Cancer
5	Prostate Cancer	10	Mol Wt Markers